



- APS NOTES:
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
 - THE 10' MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
 - PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
 - LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09, SEC. 4E.10, FIG. 4E-3, FIG. 4E-4, AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
 - APS WILL FUNCTION AS FOLLOWS:

(NORTH) TO CROSS RESEARCH BOULEVARD AT MD 28 (SIGN#47 & 48)

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
"WAIT TO CROSS RESEARCH AT WEST MONTGOMERY, CROSSWALK ANGLES RIGHT, WAIT."
B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

(NORTH/RAMP) TO CROSS RESEARCH BOULEVARD AT MD 28 RAMP (SIGN#37 & 38)

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: **RAMP**
"WAIT TO CROSS RESEARCH AT WEST MONTGOMERY, WAIT."
B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

(NORTH/WEST) TO CROSS MD 28 AT RESEARCH BLVD/CROFTON HILL LANE (SIGN#42)

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
"WAIT TO CROSS WEST MONTGOMERY AT RESEARCH, WAIT."
B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

(SOUTH/WEST) TO CROSS MD 28 AT CROFTON HILL LANE/RESEARCH BLVD (SIGN#41)

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
"WAIT TO CROSS WEST MONTGOMERY AT CROFTON HILL, WAIT."
B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

- GEOMETRIC CONSTRUCTION DETAILS:
- INSTALL PARALLEL SIDEWALK RAMP (STANDARD NO. MD 655.12).
 - INSTALL CUT-THROUGH WALKWAY (STANDARD NO. MD 655.21).
 - INSTALL STANDARD TYPE A COMBINATION CURB AND GUTTER, 12" GUTTER PAN AND 8" DEPTH (STANDARD NO. MD 620.02) (NOTE: SLOPE OF CURB TO MATCH SIDEWALK GRADE)
 - INSTALL STANDARD TYPE A CURB, 8" DEPTH (STANDARD NO. MD 620.02).
 - 48:1 LEVEL LANDING AREA.
 - TIE IN RAMP WITH EXISTING SIDEWALK AT JOINT.
 - TIE NEW CURB TO EXISTING CURB AT JOINT.
 - SAW-CUT EXISTING CONCRETE TO CREATE NEW SEAM

GEOMETRIC LEGEND

--- EXISTING
--- PROPOSED

UTILITY LEGEND

SD STORM DRAIN
G GAS MAIN
W WATER MAIN
S SEWER MAIN
E ELECTRIC CABLES
A AERIAL CABLES
T TELEPHONE CABLES
F FIBER-OPTIC CABLES

LEGEND SYMBOL

⊙ 18" PED POLE FOUNDATION

--- CONDUIT RUN

GEOMETRIC LEGEND

--- EXISTING SIDEWALK/CURB JOINT (APPROXIMATE)

□ NEW SIDEWALK AND ADA HANDICAP RAMP

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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 28 (W. MONTGOMERY AVENUE) AT
CROFTON HILL LANE/RESEARCH BOULEVARD
ROCKVILLE, MD

GEOMETRIC PLAN SHEET

SCALE 1" = 10' ADVERTISED DATE 03/2013 CONTRACT NO. XY1515185

DESIGNED BY JC COUNTY MONTGOMERY, MD
DRAWN BY JC LOGMILE 15002820.66
CHECKED BY RM TMS NO. L803
F.A.P. NO. TOD NO.

TS NO. 545-1 DRAWING SG-2 OF 2 SHEET NO. 2 OF 3

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